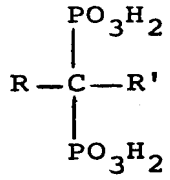
WHAT IS CLAIMED IS:

1. A pharmaceutical composition useful for the treatment of urolithiasis and for inhibiting the bone reabsorption which contains as the active ingredient a biphosphonic acid of general formula I:



(I)

wherein R is a fluorine atom or a linear or branched alkyl containing between 1 and 5 carbon atoms, said alkyl being unsubstituted or substituted by at least one substituent which is a member selected from the group consisting of amino groups, fluorine atoms and both amino and fluorine atoms and R' is hydroxy or fluorine, salts thereof with an alkali metal or an organic base or a basic aminoacid.

2. A pharmaceutical composition according to claim 1 suitable for oral administration.

3. A pharmaceutical composition according to claim 2 wherein the active ingredient is present in an amount of 10-25 mg per unit dose.

4. A pharmaceutical composition according to claim 1 suitable for systemic administration.

5. A pharmaceutical composition according to claim 4 wherein the active ingredient is present in an amount of 0.5 - 1.0 mg per unit dose.

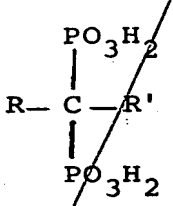
6. A pharmaceutical composition according to claim 1 wherein the active ingredient is 5-amino-1-hydroxypentan-1,1-biphosphonic acid.

7. A pharmaceutical composition according to claim 1 wherein the active ingredient is 4-amino-1-hydroxybutan-1,1-biphosphonic acid.

8. A process for the preparation of a biphosphonic acid of general formula (I) according to claim 1 wherein R is an amino-alkyl residue and R' is hydroxy which consists of reacting an aminoacid or precursor thereof with phosphorous acid and phosphorus trichloride in an inert solvent, hydrolyzing the reaction product and isolating said biphosphonic acid from the reaction mixture.

9. The process according to claim 8 wherein said aminoacid and phosphorous acid and said phosphorus trichloride are reacted in the ratio of 1:1,5:1,5.

10. A compound of formula



wherein R and R' are a member selected from the group consisting of a) amino; b) F; c) OH; d) alkyl of 1-5 carbon atoms.

11. The compound according to claim 10, 5-amino-1-hydroxypentan-1, 1-biphosphonic acid.

12. The compound according to claim 10, 4-amino-1-hydroxybutan-1, 1-biphosphonic acid.

13. The compound according to claim 10 difluoromethanbiphosphonic acid.